

In response to the Office Action dated August 24, 2005 please amend the above-identified application as follows:

IN THE CLAIMS:

Following are the current claims. For the claims that have NOT been amended in this response, any differences in the claims below and the current state of the claims is unintentional and in the nature of a typographical error:

1. (Cancelled) ~~A method for generating an electrical schematic, comprising:~~
~~loading a schematic definition file;~~
~~determining circuit component placement relationships according to the schematic definition file and a component rule set;~~
~~creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file.~~
2. (Currently Amended) ~~The method of claim 1, further comprising~~ A method for generating an electrical schematic, comprising:
loading a circuit-requirements file, the circuit-requirements file being in a first format, and generating a corresponding schematic definition file, the schematic definition file being in a second format;
loading the schematic definition file;
determining circuit component placement relationships according to the schematic definition file and a component rule set;
creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file.

3. (Currently Amended) The method of claim 4 7, further comprising displaying an electrical schematic corresponding to the schematic output file.

4. (Currently Amended) The method of claim 4 7, further comprising receiving user edits of the automatically-generated electrical schematic.

5. (Currently Amended) The method of claim 1, A method for generating an electrical schematic, comprising:
loading a schematic definition file;
determining circuit component placement relationships according to the schematic definition file and a component rule set;
~~further comprising~~ defining a location of a first component of the schematic definition file, and defining locations of a plurality of second components of the schematic definition file in relation to the location of the first component; and
creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file.

6. (Currently Amended) The method of claim 1, further comprising A method for generating an electrical schematic, comprising:
loading a schematic definition file;
determining circuit component placement relationships according to the schematic definition file and a component rule set;
creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file; and

displaying a three-dimensional image, corresponding to the automatically-generated electrical schematic, showing the relative three-dimensional location of multiple circuit components.

7. (Currently Amended) ~~The method of claim 1, A method for generating an electrical schematic, comprising:~~
~~loading a schematic definition file;~~
~~determining circuit component placement relationships according to the schematic definition file and a component rule set;~~
~~creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, wherein the schematic output file includes both two-dimensional and three-dimensional location data for a plurality of electrical components.~~

8. (Cancelled) ~~A data processing system having at least a processor and accessible memory, comprising:~~
~~means for loading a schematic definition file;~~
~~means for determining circuit component placement relationships according to the schematic definition file and a component rule set;~~
~~means for creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically generated electrical schematic corresponding to the schematic definition file.~~

9. (Currently Amended) The data processing system of claim 8 14, further comprising means for loading a circuit-requirements file, the circuit-requirements file being in a first format, and means for generating a corresponding schematic definition file, the schematic definition file being in a second format.

10. (Currently Amended) The data processing system of claim 8 14, further comprising means for displaying an electrical schematic corresponding to the schematic output file.

11. (Currently Amended) The data processing system of claim 8 14, further comprising means for receiving user edits of the automatically-generated electrical schematic.

12. (Currently Amended) The data processing system of claim 8 14, further comprising means for defining a location of a first component of the schematic definition file, and means for defining locations of a plurality of second components of the schematic definition file in relation to the location of the first component.

13. (Currently Amended) The data processing system of claim 8 14, further comprising means for displaying a three-dimensional image, corresponding to the automatically-generated electrical schematic, showing the relative three-dimensional location of multiple circuit components.

14. (Currently Amended) The data processing system of claim 8 A data processing system having at least a processor and accessible memory, comprising:
means for loading a schematic definition file;
means for determining circuit component placement relationships according to the schematic definition file and a component rule set;
means for creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, wherein the schematic output file includes both two-dimensional and three-dimensional location data for a plurality of electrical components.

15. (Cancelled) A computer program product tangibly embodied in a machine-readable medium, comprising:

~~instructions for loading a schematic definition file;~~

~~instructions for determining circuit component placement relationships according to the schematic definition file and a component rule set;~~

~~instructions for creating a schematic output file corresponding to the circuit competent placement relationships and the schematic definition file,~~

~~wherein the schematic output file describes an automatically generated electrical schematic corresponding to the schematic definition file.~~

16. (Currently Amended) The computer program product of claim ~~15~~ 21, further comprising instructions for loading a circuit-requirements file, the circuit-requirements file being in a first format, and instructions for generating a corresponding schematic definition file, the schematic definition file being in a second format.

17. (Currently Amended) The computer program product of claim ~~15~~ 21, further comprising instructions for displaying an electrical schematic corresponding to the schematic output file.

18. (Currently Amended) The computer program product of claim ~~15~~ 21, further comprising instructions for receiving user edits of the automatically-generated electrical schematic.

19. (Currently Amended) The computer program product of claim ~~15~~ 21, further comprising instructions for defining a location of a first component of the schematic definition file, and instructions for defining locations of a plurality of second components of the schematic definition file in relation to the location of the first component.

20. (Currently Amended) The computer program product of claim 15 21, further comprising instructions for displaying a three-dimensional image, corresponding to the automatically-generated electrical schematic, showing the relative three-dimensional location of multiple circuit components.

21. (Currently Amended) ~~The computer program product of claim 15 A~~
~~computer program product tangibly embodied in a machine-readable medium,~~
~~comprising:~~
instructions for loading a schematic definition file;
instructions for determining circuit component placement relationships according
to the schematic definition file and a component rule set;
instructions for creating a schematic output file corresponding to the circuit
competent placement relationships and the schematic definition file,
wherein the schematic output file describes an automatically-generated
electrical schematic corresponding to the schematic definition file,
wherein the schematic output file includes both two-dimensional and three-dimensional location data for a plurality of electrical components.